Claims

1. A compound for inhibiting the activity of PARP having formula I:

$$\int_{\mathbb{R}^{N}}^{\mathbb{N}} \int_{\mathbb{N}^{-}}^{\mathbb{N}} I$$

and pharmaceutically acceptable salts thereof.

2. A compound for inhibiting the activity of PARP having formula II:

and pharmaceutically acceptable salts thereof.

3. A compound for inhibiting the activity of PARP having formula

and pharmaceutically acceptable salts thereof.

4. A compound according to claim 1, wherein the compound is in the form of a phosphate salt of the following formula:

Formula I - phosphate

5. The use of a therapeutic amount of a compound of formula I, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament.

6. The use of a therapeutic amount of a compound of formula II, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament.

7. The use of a therapeutic amount of a compound of formula III, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament.

8. The use of a therapeutic amount of a compound of formula I, and

pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of a disease or condition that is caused by a genetic defect in a gene that mediates homologous recombination.

- 9. The use of a therapeutic amount of a compound of formula II, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of a disease or condition that is caused by a genetic defect in a gene that mediates homologous recombination.
- 10. The use of a therapeutic amount of a compound of formula III, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of a disease or condition that is caused by a genetic defect in a gene that mediates homologous recombination.
- 11. The use as claimed in any one of claims 8 to 10, wherein the defect is a gene encoding a protein involved in HR.
- 12. The use as claimed in any one of claims 8 to 10, wherein the defect is the absence of a gene encoding a protein involved in HR.
- 13. The use as claimed in any one of claims 8 to 10, wherein the defect is in the expression of a gene encoding a protein involved in HR.

- 14. The use of a therapeutically effective amount of a compound of formula I and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for inducing apoptosis in HR defective cells.
- 15. The use of a therapeutically effective amount of a compound of formula II, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for inducing apoptosis in the defective cells.
- 16. The use of a therapeutically effective amount of a compound of formula III, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for inducing apoptosis in the defective cells.
- 17. The use of a therapeutically effective amount of a compound of formula I, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of cancer.
- 18. The use of a therapeutically effective amount of a compound of formula II, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of cancer.
- 19. The use of a therapeutically effective amount of a compound of formula III, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of cancer.

- 20. The use of a compound according to any one of claims 15 to 17, wherein the cancer is gene-linked hereditary cancer.
- 21. The use of a therapeutically effective amount of a compound of formula I, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of cancer cells defective in BRCA1 and/or BRCA2 expression.
- 22. The use of a therapeutically effective amount of a compound of formula II, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of cancer cells defective in BRCA1 and/or BRCA2 expression.
- 23. The use of a therapeutically effective amount of a compound of formula III, and pharmaceutically acceptable salts thereof, in the manufacture of a medicament for the treatment of cancer cells defective in BRCA1 and/or BRCA2 expression.
- 24. The use of a compound according to any one of claims 21 to 23, wherein the cancer cells to be treated are partially or totally deficient in BRCA1 and/or BRCA2 expression.
- 25. A pharmaceutical composition comprising a compound of formula I, and a pharmaceutically acceptable salt thereof, as an active ingredient.
- 26. A pharmaceutical composition comprising a compound of formula II, a pharmaceutically acceptable salt thereof, as an active ingredient.

- 27. A pharmaceutical composition comprising a compound of formula III and a pharmaceutically acceptable salt thereof, as an active ingredient.
- 28. A pharmaceutical composition according to any one of claims 25 to 27, wherein the composition further comprises at least one diluent and/or carrier together with at least one bulking agent.
- 29. A pharmaceutical composition according to claim 28, wherein the carrier and/or diluent is selected from any of the following either alone or in combination, saline, buffered saline, dextrose, water, glycerol and ethanol.
- 30. A method for the treatment of cancer in mammals comprising administering a compound of formula I as described in claim 1, or a pharmaceutically acceptable salt thereof:
 - 31. A method for the treatment of cancer in mammals comprising administering a compound of formula II as described in clam 2, or a pharmaceutically acceptable salt thereof:
 - 32. A method for the treatment of cancer in mammals comprising administering a compound of formula III as described in claim 3, or a pharmaceutically acceptable salt thereof: